

REMARKS

Claims 1, 4, 9, 15, 20, 23, 28, 34, 39, 42, 47, 70, 71, 73, 74, 76, 77, and 79 have been amended. Claims 2, 3, 12, 21, 22, 31, 40, 41, 50, 58, 59, 63, 64, 68, 69 have been canceled. Claims 1, 4, 9, 15, 20, 23, 28, 34, 39, 42, 47, 70-71, and 73-79 are pending in the instant application.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance.

I. The Rejection of Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, and 67-71 under 35 U.S.C. § 112, Second Paragraph

Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, and 67-71 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite on the following grounds.

Ground 1: The Office Action alleges that claims 1 and 20 are vague and indefinite because it is unclear whether the first and second nucleic acid sequences are a fusion/hybrid sequence. The Office Action stated: "The claim should be written to make it clear that the method includes cultivating a mutant cell which was 'transformed with a nucleic acid sequence encoding a heterologous protein' wherein the mutant host cell comprises a mutation in at least one of the genes *cpx* [sic] and *yvmC* so that it is clear that the host cell has been mutated to express a heterologous protein and it is not the vector which is being inserted into the *Bacillus* cell which has been mutated".

While Applicants submit that claims are clear and definite for the reasons of record, to further prosecution of the instant application, Applicants have reworded the claims using language in part suggested by the Office.

Ground 2: The Office Action alleges that claim 39 is vague and indefinite because it recites a method of isolating a mutant of a parent *Bacillus* cell, yet it does not appear that the mutant is isolated from the parent cell, but rather the parent cell is mutated and suggested changing the wording to "A method of producing an isolated mutant *B. subtilis* cell".

While Applicants again submit that claims are clear and definite for the reasons of record, to further prosecution of the instant application, Applicants have reworded the claims using language in part suggested by the Office.

For the foregoing reasons, Applicants submit that the rejections under 35 U.S.C. § 112 have been overcome and respectfully request reconsideration and withdrawal of the rejections.

II. The Rejection of Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, 67-71, and 73-79 under 35 U.S.C. § 112, First Paragraph

Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, 67-71, and 73-79 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Office Action stated:

[T]he specification, while being enabling for "A method of producing a heterologous protein, comprising: transforming a mutant *B. subtilis* cell, wherein said mutant cell comprises a deletion mutation in the *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7, in which said deletion mutation renders the cell deficient in red pigment compared to a wild-type *B. subtilis* cell comprising said *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7, with a recombinant vector comprising a nucleic acid directing synthesis of the heterologous protein and recovering the heterologous protein from the cell"; "a mutant *B. subtilis* cell, wherein said mutant cell comprises a deletion mutation in the *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7, in which said deletion mutation renders the cell deficient in red pigment compared to a wild-type cell comprising said *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7, and a recombinant vector comprising a nucleic acid directing synthesis of a heterologous protein"; and "A method of obtaining a mutant *B. subtilis* cell, comprising: making a deletion mutation to the *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7, in which said mutation renders the cell deficient in red pigment compared to a wild-type *B. subtilis* cell comprising said *cypX* gene comprising SEQ ID NO: 1 or the *yvmC* gene comprising SEQ ID NO: 7", does not reasonably provide enablement for the scope of the instant claims.

This rejection is respectfully traversed for the reasons of record. While Applicants disagree with the Office's reasoning for the reasons of record, Applicants have amended the claims based on the Office's statement above to further prosecution, but reserve the right to file continuing applications to the withdrawn subject matter.

For the foregoing reasons, Applicants submit that the rejections under 35 U.S.C. § 112 have been overcome and respectfully request reconsideration and withdrawal of the rejections.

III. The Rejection of Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, 67-71, and 73-79 under 35 U.S.C. § 112, First Paragraph

Claims 1-4, 9, 13, 15, 20-23, 28, 31, 34, 39-42, 47, 50, 58-60, 62-65, 67-71, and 73-79 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Office Action stated:

The specification only provides adequate written description for methods which use *B. subtilis* genes and mutations of the *cypX* gene set forth in SEQ ID NO: 1

and the yvmC gene set forth in SEQ ID NO: 7 and not the broad scope of the claims.

This rejection is respectfully traversed for the reasons of record. While Applicants disagree with the Office's reasoning for the reasons of record, Applicants have amended the claims based on the Office's statement above to further prosecution, but reserve the right to file continuing applications to the withdrawn subject matter.

For the foregoing reasons, Applicants submit that the rejections under 35 U.S.C. § 112 have been overcome and respectfully request reconsideration and withdrawal of the rejections.

IV. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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